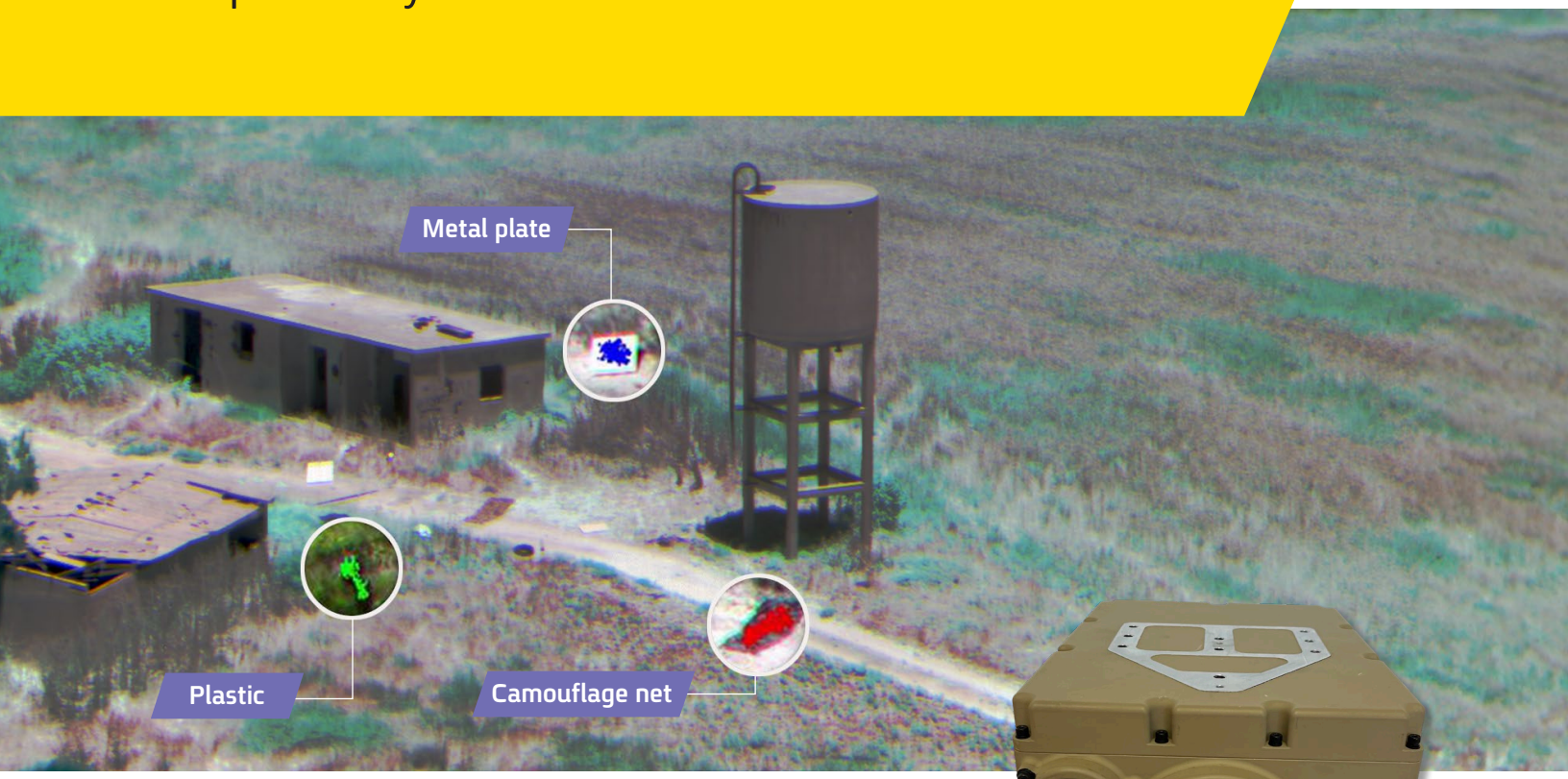
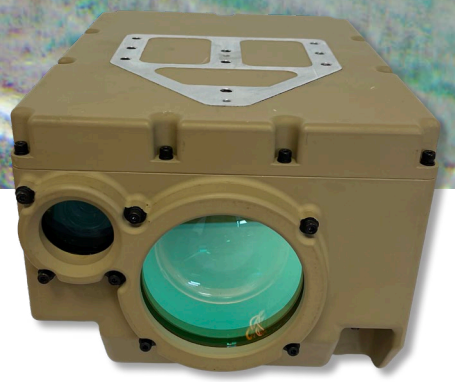
CU MODULE

Multispectral System for Materials Identification





A New Capability for Detection and Identification of Hidden Targets

The CU Multispectral Module is a groundbreaking, autonomous imaging system for complex target detection and acquisition.

The Module's passive multispectral imaging sensors identify the distinctive spectral signatures of targets made of a variety of materials. Sophisticated optical image-processing technologies provide real-time intelligence, enabling detection and identification of hidden or exposed targets based on their unique spectral fingerprints. Materials may be pre-defined by the operator through real-time sampling or via the module's anomaly detection of materials.

Transforming the identification of hidden targets, working autonomously in real-time, the CU Module reveals the unseen and enables identification through the unique spectral signature of the target materials.

Elbit Systems™
ISTAR & EW

CU MODULE

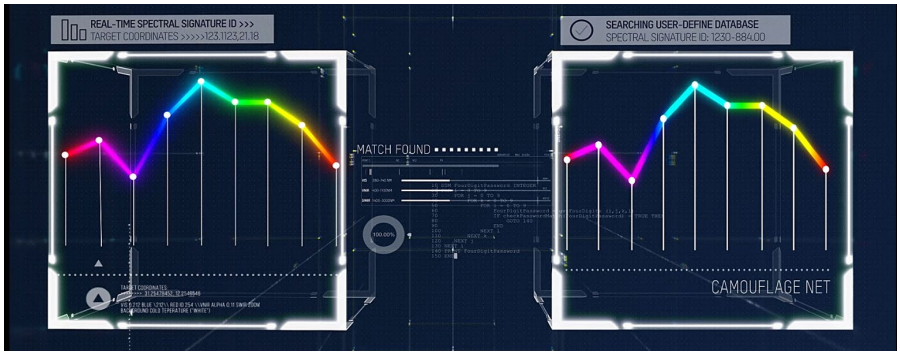
Multispectral System for Materials Identification

Applications

The system can be installed on a variety of drone types and UAVs as well as on on aerial, maritime and land platforms. Meeting international standards, it is ideal for a wide range of military, search and rescue and law enforcement missions. Civilian use includes identification of environmental pollution, as well as agriculture-related activities.

How It Works

A spectral sample of the materials being sought, is uploaded to the system's database.



Using Module CU on a platform, a search is made for materials in real-time, comparing them to the sample stored in the database. When a match is discovered, the CU Module alerts the user. Comparisons can also be made on anomalies.

Unique Multispectral Imaging Technologies

High-performance spectral filters and patented software collect and map the spectral data of different materials, calculating the spectral signature of each pixel in the FOV. With superior optics, material sensing, distinctive signature extraction algorithms and lock capabilities, the CU Module can reacquire lost targets and detect and identify hidden or camouflaged targets, materials, survivors at sea, or any spectral anomalies in real-time.

Benefits

- Passive target detection & classification
- Multispectral identification of unseen targets
- Operates in real-time
- Automatic detection of materials & anomalies
- Rapid location of disappearing objects
- Automatic AI atmospheric correction
- Reduced operator's cognitive load
- Integration with most platforms
- Enhanced maneuverability
- Easy, real-time operation
- Multiple applications

Technical Specifications

- Weight: <3kg
- Dimensions: 144 X 110 X 207mm
- 6.5^0 HFOV
- Wavelength: 625-1700nm
- Effective focal length: 110mm
- F#3
- 12 spectral bands
- 1280X1024 resolution
- Day zoom camera: 5.3 to 25^0 HFOV, 1920X1080 resolution

Elbit Systems Ltd.
Advanced Technology Center, P.O.B 539, Haifa 3100401, Israel
E-mail: istar@elbitsystems.com www.elbitsystems.com

Follow us on

The logo brand, product, service, and process names appearing herein are the trademarks or service marks of Elbit Systems Ltd., its affiliated companies or, where applicable, of other respective holders.
All information in this document is for general information only, and is subject for change without notice. © 2016. This brochure contains Elbit Systems and others proprietary information. EP24-MKT-012